CEOS LAND PRODUCT

SUBGROUP REPORT

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WGCV Plenary, Budapest, Hungary
9-12 May 2006

LPV outline

- Subgroup administrative issues
  - goals and objectives
  - Fred Baret has agreed to take over as the new chair, Sebastien Garrigues has agreed to be vice-chair
- LPV accomplishments
  - Web site initiated and maintained
  - Land cover-best practices document
  - Special Issue – due out July 2006
  - LAI inter-comparison (Garrigues)
- LPV opportunities
  - Global Vegetation workshop
  - Inter-compairson from <60m resolution sensors
  - Interaction with Global Observation of Forest Cover and Land Dynamics (Csiszar)

CEOS Definition

Validation:

the process of assessing by independent means the quality of the data products derived from the system outputs

LPV operates under this definition, but with the understanding that validation activities should consider user accuracy needs and feedback to algorithm improvements.

Mission Statement & Goals

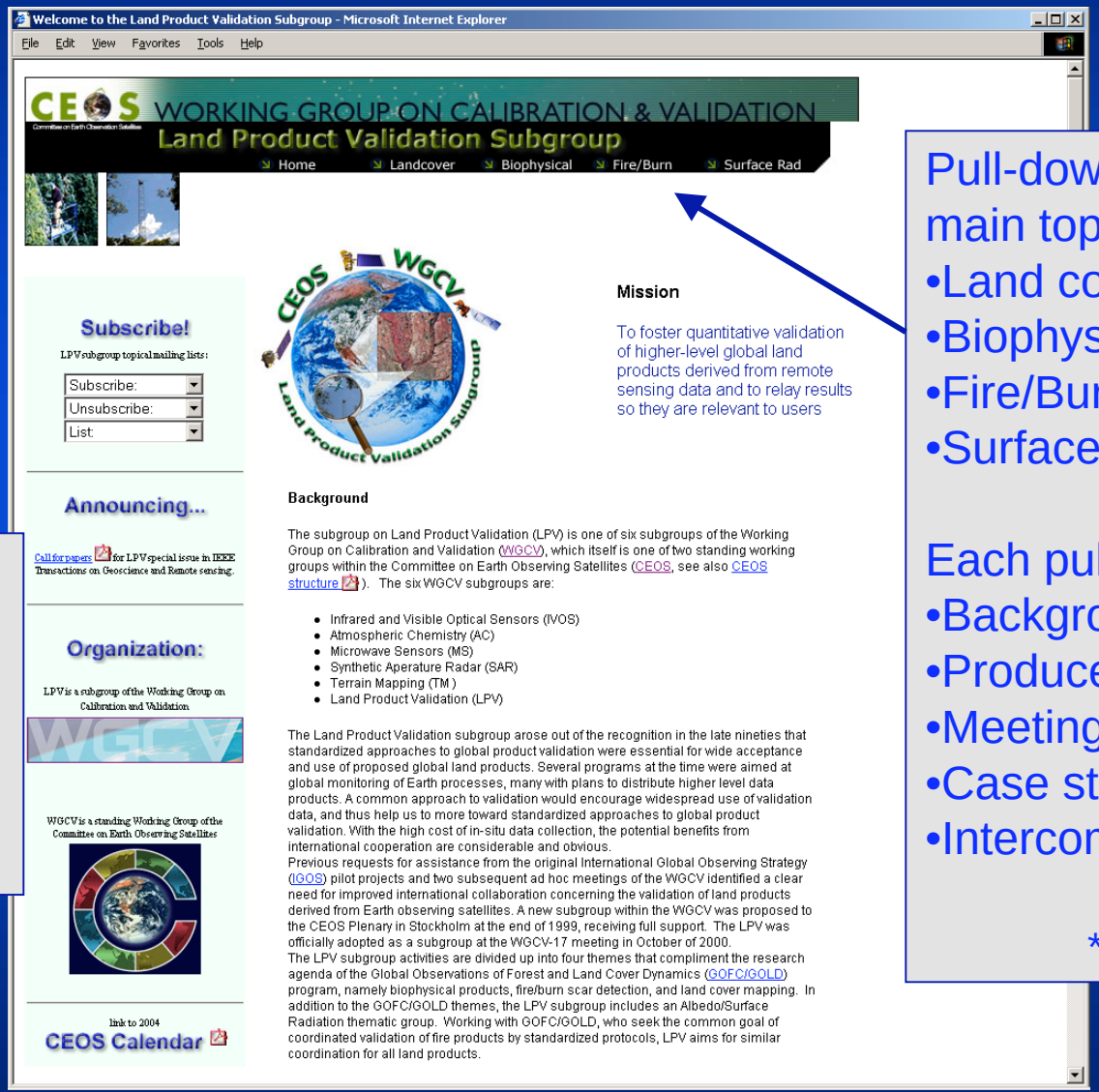
- to foster quantitative validation of *higher level global land products* derived from remote sensing data and relay results so they are relevant to users
- to increase the quality and economy of global satellite product validation *via* developing and promoting international standards and protocols for field sampling, scaling, error budgeting, data exchange for global land product validation
- to advocate mission-long validation and intercomparison programs for current and future earth observing satellites.

Objectives: with GEOSS opportunities

- Work with users to define uncertainty objectives
  - Focus on GEOSS application areas
- Identify opportunities for coordination and collaboration
  - Capitalize on field data networks coordinated through GEOSS
- Develop consensus “best practice” protocols for data collection and description
  - GEOSS could “approve/publish” related document
- To develop procedures for validation, data exchange and management - with a focus on land product validation core sites (done in conjunction with WGISS)
  - GEOSS could “approve” related activities
- To serve as a clearinghouse for accuracy statements on CEOS member global land products (possibly through the CEOS/WMO database?)

http:lpvs.gsfc.nasa.gov

Matches WGCV page layout and graphic



Pull-down menu for main topical areas:
- Land cover
- Biophysical
- Fire/Burn
- Surface Radiation

Each pull-down lists:
- Background
- Producers *
- Meetings
- Case studies
- Intercomparisons

* input needed

Quick links to:
- Listserves
- Announments
- WGCV
- CEOS and
- CEOS calendar

web curator: Jaime Nickeson, NASA GSFC

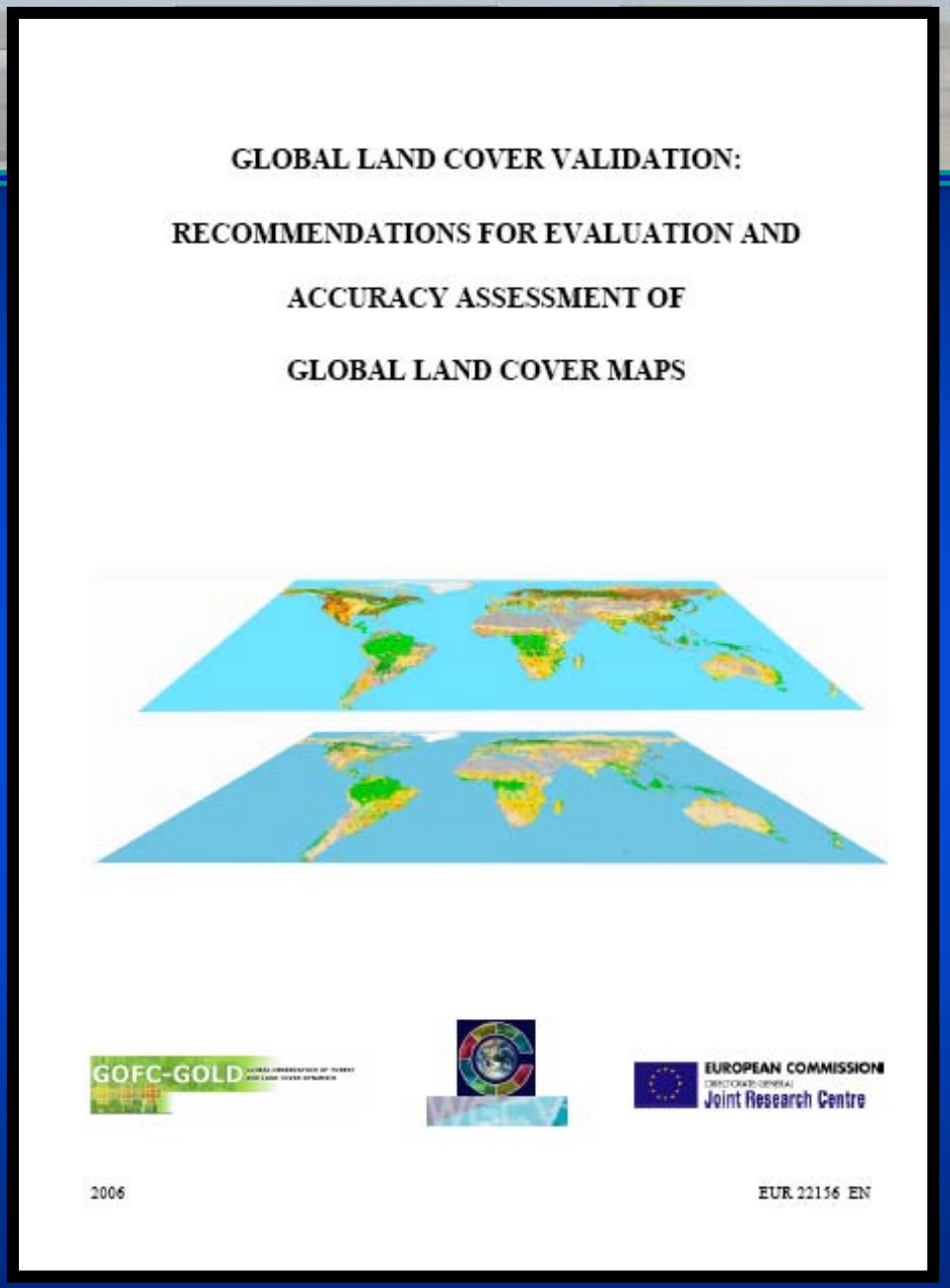
Edited by: Strahler

Authors: Boschetti, Foody, Friedl, Hansen, Herold, Mayaux, Morisette, Stehman, Strahler, & Woodcock

Primary finding:

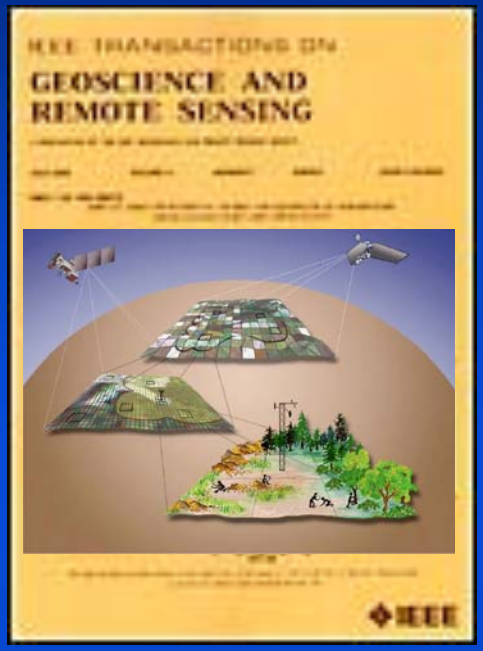
- Call for global inter-comparisons
- "Hybrid" statistical sampling using fixed sites
- Confidence layers (model-based accuracy)

Will be available through the LPV web site.



LPV "Special Issue" of IEEE TGRS

- Special Issue: describing the state of the art research on both protocol and results for validation and accuracy assessment of global land products
  (Morisette, Baret, and Liang guest editors)
- Three "framework" papers
  19 "validation results" and
  four "user response" papers - an attempt to solicit "user feedback".



	2004									2005											2006			
	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	N	D	J	F	M
Announcement																								
Validation papers				submissions						reviews				revisions			review			final/profs				
User perspective papers							submissions							reviews			revisions				final/profs			
Publication date																								

July 2006

Inter-sensor workshop: GEOSS focus

Long term global monitoring of vegetation variables using moderate resolution satellites

Aug 8-10, University of Montana, Missoula Montana

- Increasing knowledge through combined products,
- Realizing efficiency by avoiding redundancy, and
- Developing near- and long-term plans to avoid gaps in our understanding of critical global vegetation information.

Day 1: program and sensor overview

Day 2: Pilot studies and product-specific break-out sessions

Day 3: Reaction to break-outs and plan development

Aug 7: LPV workshop on long-term VI record

http://www.ntsg.umt.edu/VEGMTG/

NTSG Workshops

http://www.ntsg.umt.edu/VEGMTG/

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Numerical Terradynamic Simulation Group

Global Vegetation Workshop 2006

- **VI Validation (Aug 7):**
  - -Home
- **Global Veg (Aug 8-10):**
  - -Home
  - -Schedule
- **Registration:**
  - -Online {Credit Card}
  - -Mailing {PDF Form}
  - -Register a Poster
- **Missoula & Montana:**
  - -Getting to Missoula
  - -Hotels/Lodging
  - -About Missoula
  - -Other Attractions
- **Univ of Montana:**
  - -UM Home
  - -Campus Recreation
  - -Book Store
  - -Campus Map
- **More information:**
  Ms. Youngee Cho
  (406) 243-6311, phone
  (406) 243-4510, fax
  Email Youngee

Hosted By:

Long term global monitoring of vegetation variables using moderate resolution satellites:

A combined meeting of the third biennial global vegetation workshop at the University of Montana and the Committee on Earth Observing Satellites Working Group on Calibration and Validation.

August 8-10, 2006

University of Montana
Missoula, Montana

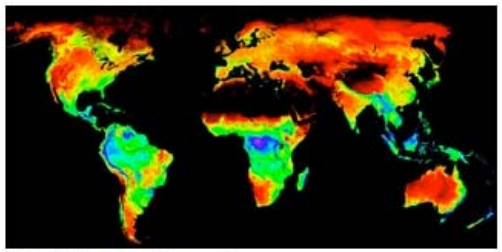
A number of international organizations are focusing on the requirements for, and the accuracy and use of, Earth observation from space to address both science and applications questions concerning our terrestrial environment. There are now multiple global vegetation products from several similar sensors - with more planned over the next several years. This situation has provided the impetus for the CEOS Working Group on Calibration and Validation (WGCV) through its Land Product Validation sub-Group (LPV) to better coordinate satellite-based global observations of vegetation parameters.

The primary objective of this workshop is to establish a framework to understand the inter-relationship between multiple, global vegetation products so to identify opportunities for:

- Increasing knowledge through combined products,
- realizing efficiency by avoiding redundancy, and
- developing near- and long-term plans to avoid gaps in our understanding of critical global vegetation information.

August 7, 2006

VI Validation Pre-Workshop
Validation of global vegetation indices and their time series (*A CEOS Land Product Validation topical workshop*)



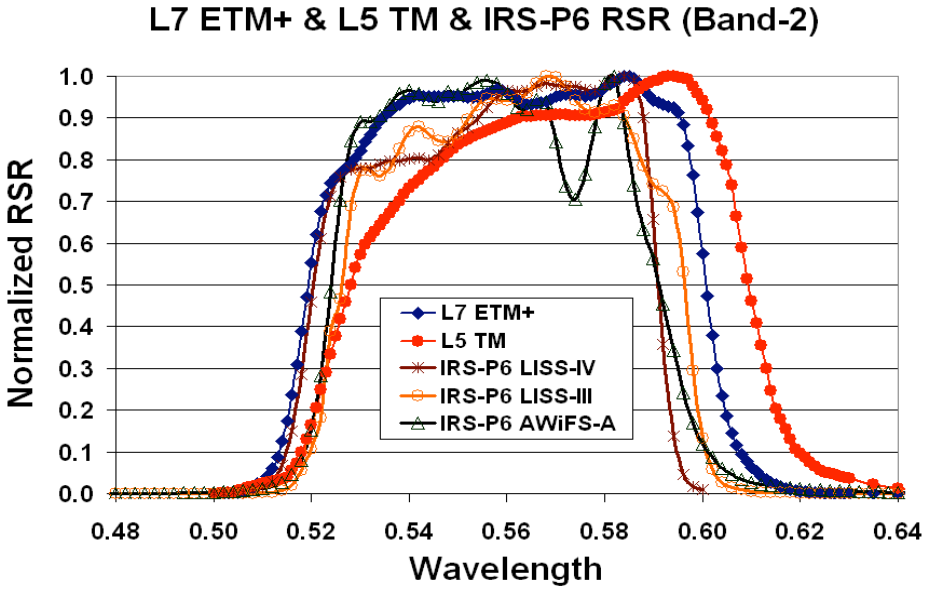
Call For Posters

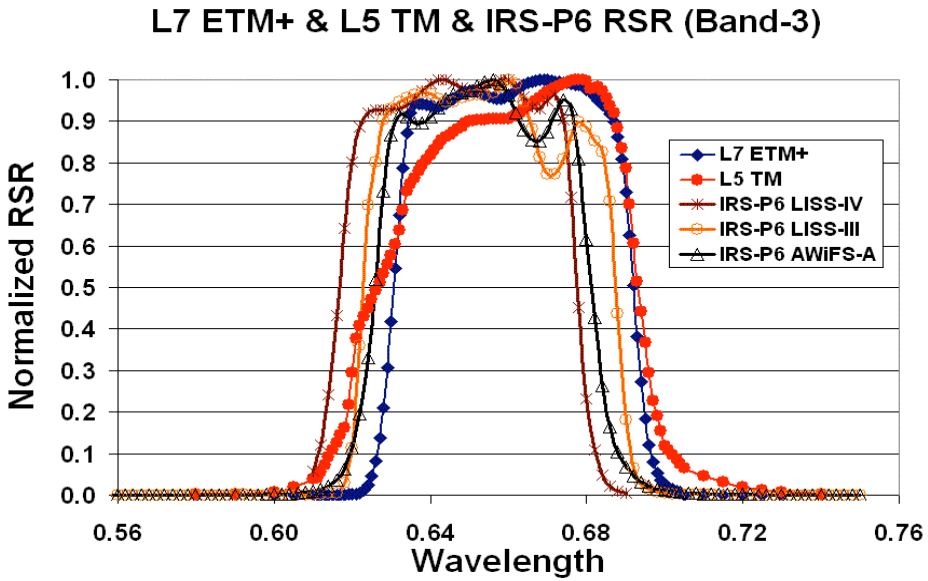
A poster session will run throughout the entire meeting. There will be an initial poster "reception" along with registration on Monday evening, August 7th.

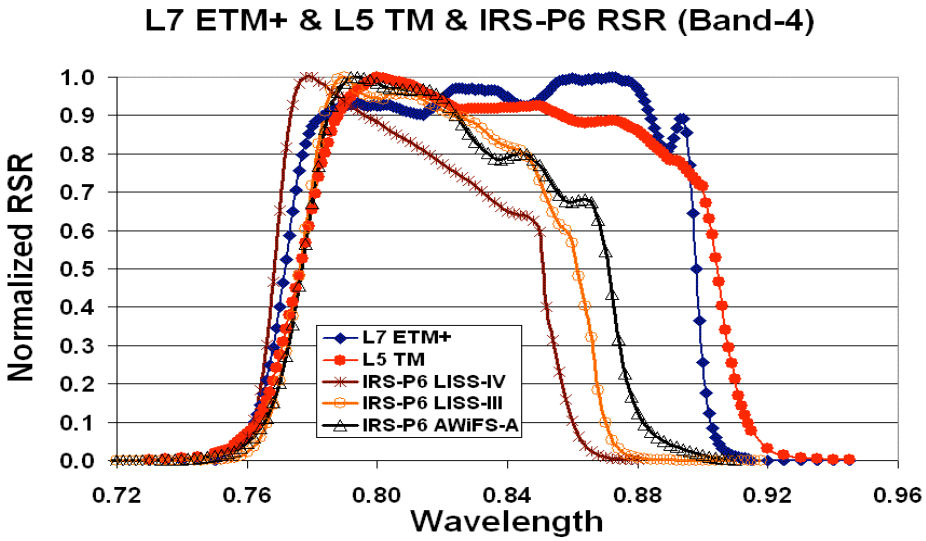
Submit a Poster for the Meeting from the following specific areas:

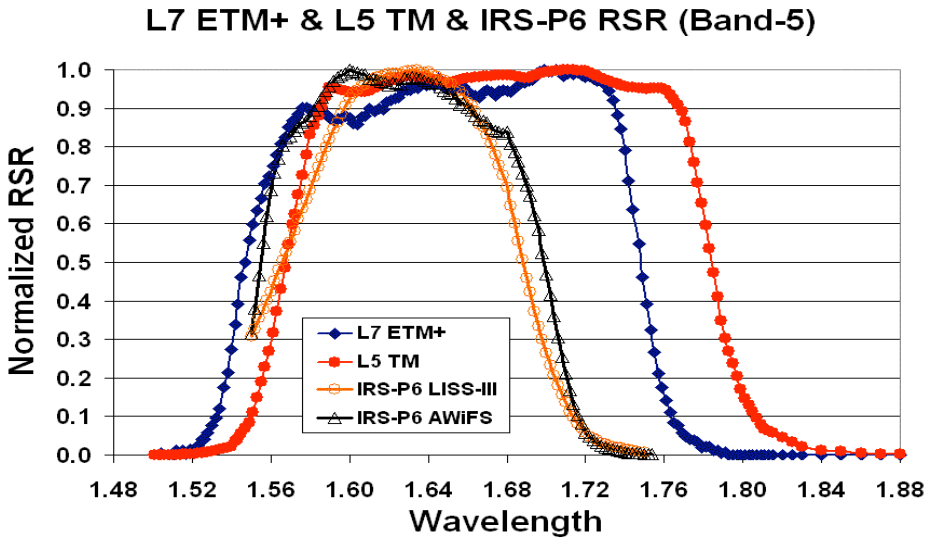
IRS-P6 Relative Spectral Response Comparison

G. Chander (provided by Ed Kaita, NASA Goddard Space Flight Center



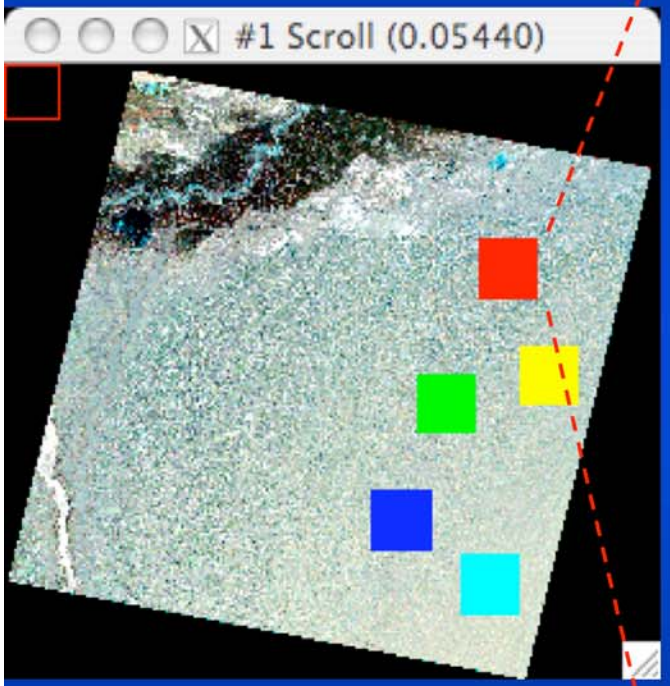


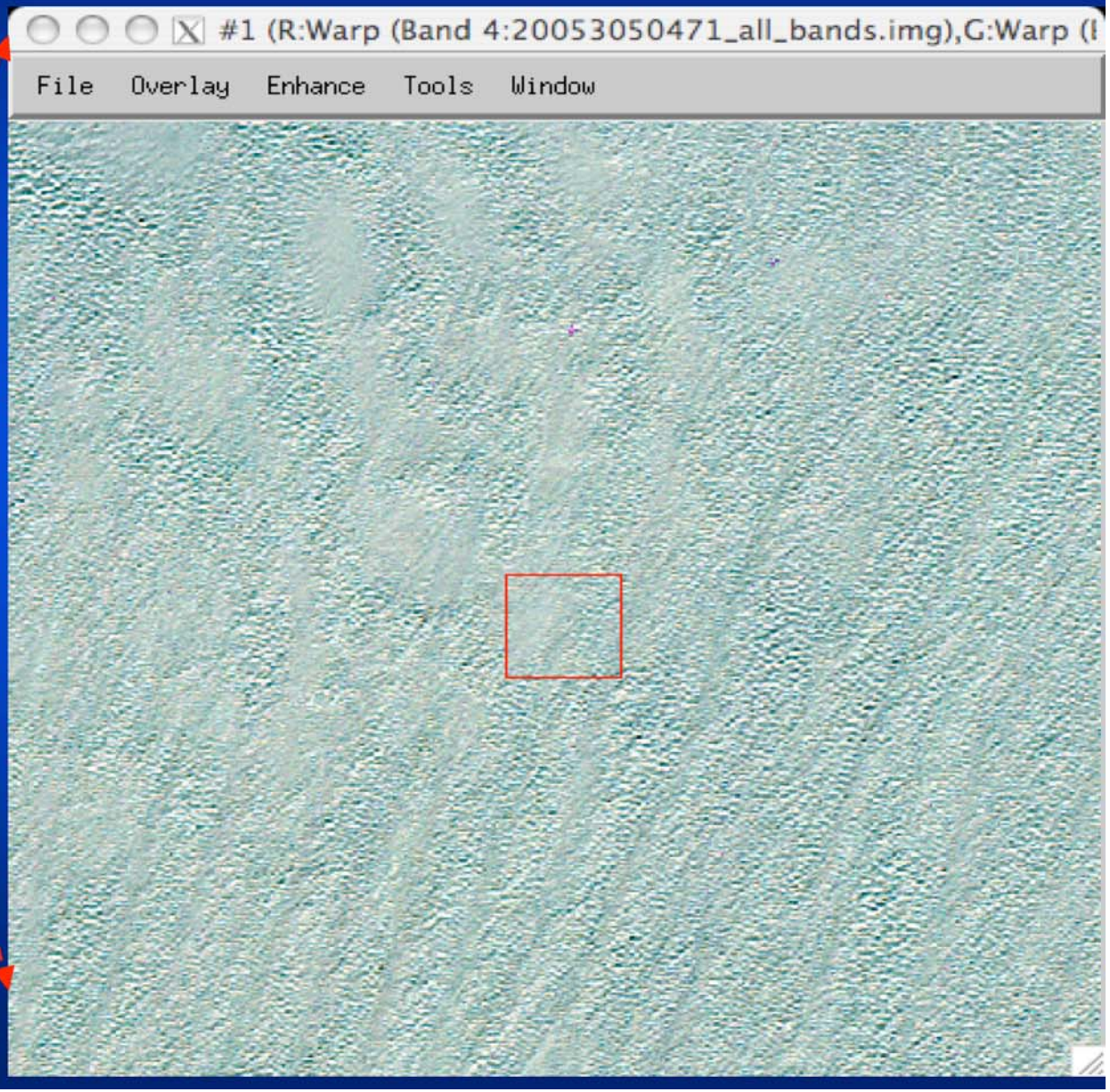




CBERS HRCCD and L-7 ETM+ Cross Calibration

J. Barsi, NASA GSFC





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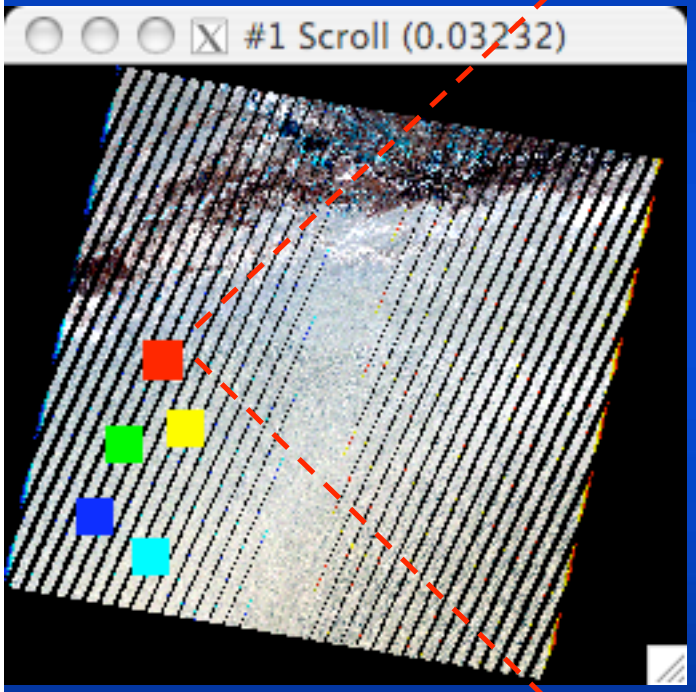

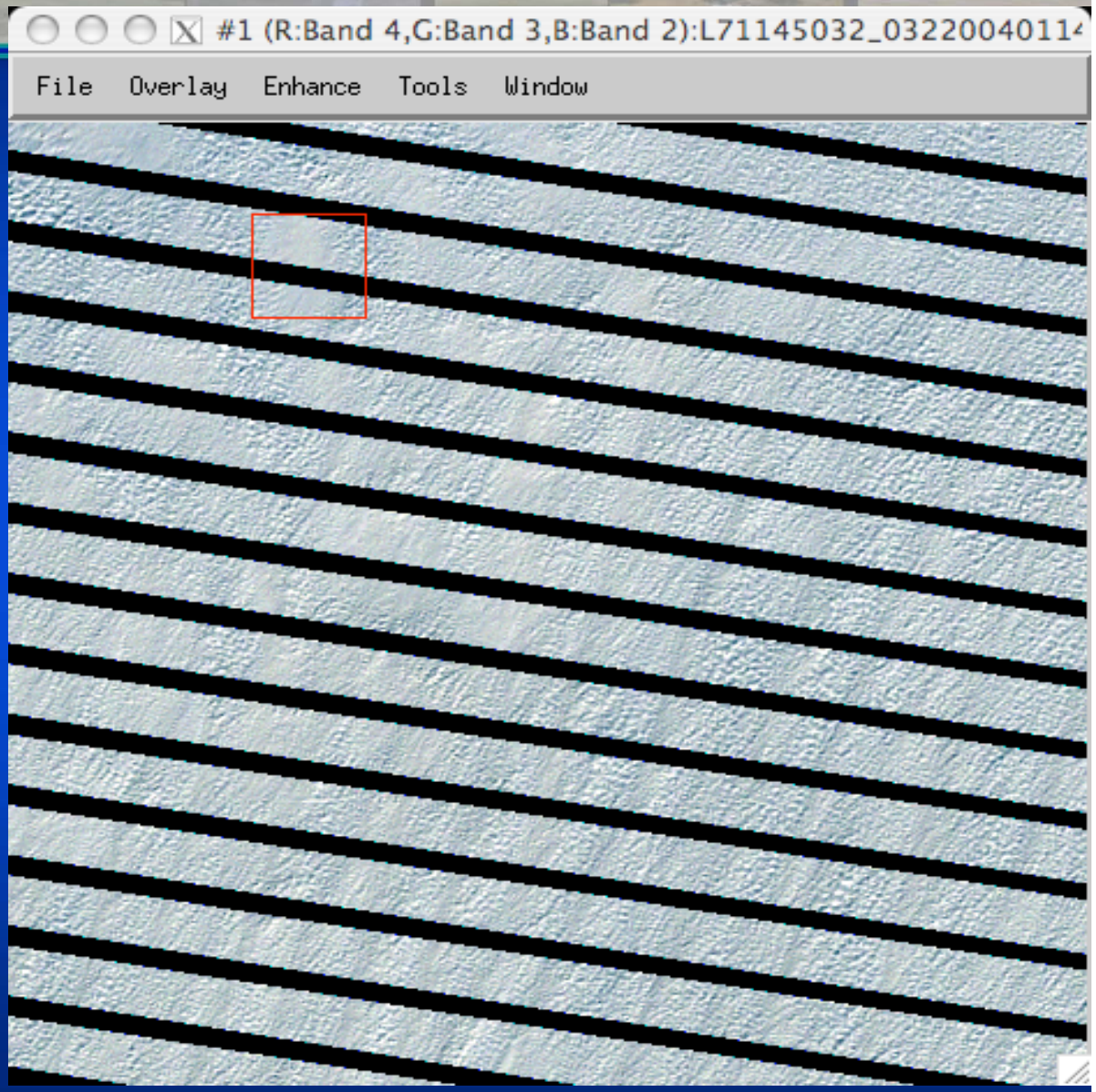

Less than 60m spatial resolution Inter-sensor comparison

CEOS WGCV should be considering both the radiometric comparison (through IVOS) as well as the implication for higher-order, derived products (through LPV)

The initial step could be to encourage CEOS members to provide repeat and continued coverage from these sensors at the CEOS Land Validation Core Sites

This could be a recommendation for this meeting